Screening Whole Breast Ultrasound

Screening whole breast ultrasound (US) uses sound waves to produce internal images of the breasts. It is used with mammography. US is not offered for screening at all centers.

Benefits: In women at high risk, it finds additional cancers not found by mammography.

Risks: More false alarms — additional imaging and biopsies; some cancers will not be visible on US.

The American Cancer Society, American College of Radiology, Society of Breast Imaging and American Congress of Obstetricians and Gynecologists, among others, all highly value regular mammographic screening. Yearly mammography starting at age 40 saves the most lives and is recommended. Women at high risk may benefit from starting earlier.

More Information

For more information on breast cancer screening, visit MammographySavesLives.org or RadiologyInfo.org.
Mammography screening beginning at age 40 has helped reduce breast cancer deaths by 35% since 1990. Still, 40,000 U.S. women will die from the disease each year. If all women 40 and older would get yearly screening, breast cancer deaths would drop 40%.

Starting annual screening at age 40 saves significantly more lives and more years of life for survivors than delaying screening until age 45 or 50 or screening every other year. Delayed or less frequent screening also exposes women to more extensive and expensive treatment than if their cancer were found early by a mammogram.

**Mammography**

A mammogram is a low-dose X-ray used to examine breasts for cancer and other diseases. It is the only screening test proven to reduce risk of dying from breast cancer.

The American College of Radiology, the Society of Breast Imaging and other national medical organizations recommend that women 40 and older get yearly mammograms. The American Cancer Society agrees that getting yearly mammograms starting at age 40 has the most benefit; they urge women to start no later than age 45.

Those at increased risk due to a family history or other factors should talk to their doctor about screening earlier.

Women age 55 and older may choose to be screened every one to two years but, on average, yearly screening will find cancers earlier. About 26% of cancer deaths occur in women diagnosed after age 74. At age 75, the average American woman will live 13 years; for many, this age may be too early to stop screening.

**Benefits:** Less risk of breast cancer death; may find breast cancer early, when most treatable with less extensive surgery or therapy.

**Risks:** Some women experience mild, temporary discomfort or anxiety during mammography; 10% called back for more imaging; 1–2% may need needle biopsy.

The very small radiation dose is equal to a few weeks of natural background radiation.

Some women may have a normal mammogram, but develop breast cancer before the next screening exam. No screening test is 100% accurate.

**Digital Breast Tomosynthesis (DBT)**

DBT (also known as 3-D mammography) is a mammography system that creates a series of thin image slices through the breast that allow for improved cancer detection — particularly in women with denser breasts — and means fewer patients recalled for additional imaging. DBT is used in women for which screening mammography is recommended. Of the DBT systems currently available, some have about the same radiation exposure as standard digital mammography and some are 1.5 to 2 times higher.

**Breast Magnetic Resonance Imaging (MRI)**

Breast magnetic resonance imaging (MRI) uses magnets to produce detailed images of the breast. It does not use X-ray radiation. Screening MRI is reserved for women at high risk for developing breast cancer.

**Benefits:** Best method for finding early breast cancer; detects cancers not found on mammography, tomosynthesis or ultrasound.

**Risks:** Finds many things that are not cancer; may lead to additional imaging and biopsies; requires an intravenous injection; expensive; pacemakers or other implanted metal devices not compatible.